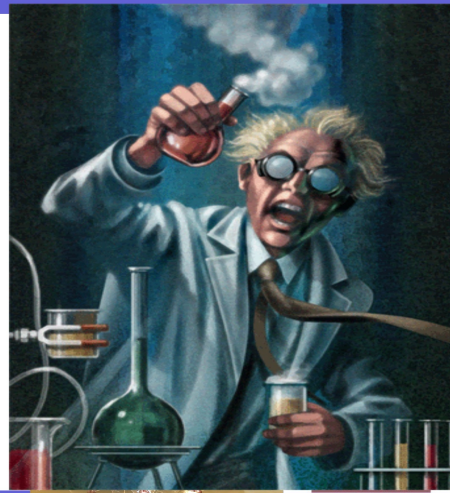


What is Science?

On a sheet of white paper draw a picture of a Scientist doing science.
When you are done with your drawing post it on the chalkboard.



What is Science?

What is NOT Science?

SCIENCE

What are examples of Science?

Copy and fill in this chart in your notebook

What is Science?

What is NOT Science?

SCIENCE

What are examples of Science?




Variables

Scientists often use an experiment to search for *cause and effect relationships* in nature. They design an experiment so that changes to one item cause something else to vary in a predictable way.

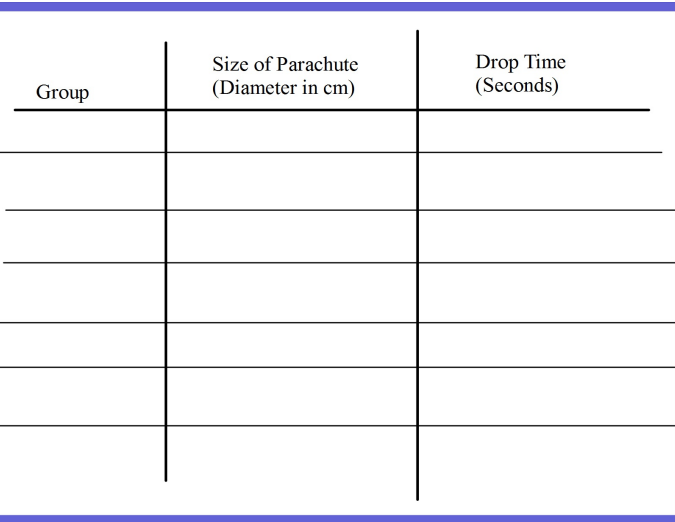
These changing quantities are called *variables*, and an experiment usually has three kinds:

- The *independent (manipulated) variable* is the one that is changed by the scientist. In an experiment there is only one independent variable. As the scientist changes the independent variable, he or she *observes* what happens.
- The *dependent (responding) variable* changes in response to the change the scientist makes to the independent variable. These changes are *caused* by and *depend* on the value of the independent variable.
- Experiments also have *controlled variables*. Controlled variables are factors that a scientist wants to remain constant, and are used to make comparisons.

These changing quantities are called **variables**, and an experiment usually has three kinds:

- How does the size of the parachute affect air resistance?**
- MV:
RV:
CV:
- 
- 1) Find the appropriate sized template and cut out a circle from a plastic bag
 - 2) Punch holes at 12, 3, 6 and 9 o'clock
 - 3) Attach 18 inches of string to each hole and loosely tie the strings together
 - 4) Tape or tie the weight to the end of the string. Each snap block is 1 gram

MV: The size of the parachute
RV: How long it takes for it to fall
CV: Same material, same weight, same drop height



THE SCIENTIFIC WORLD VIEW

Scientists share certain basic beliefs and attitudes about what they do and how they view their work. These have to do with the nature of the world and what can be learned about it.

1) The World Is Understandable

What this means is:

2) Scientific Ideas Are Subject To Change

What this means is:

3) Scientific Knowledge Is Durable

What this means is:

4) Science Cannot Provide Complete Answers to All Questions

What this means is:

What is your science autobiography?

Think about your experiences with science. Write an short autobiography about you and science (record your ideas in your notebook today, we will type them up later)

- How do you feel about being in a science class this semester?
- What were your science classes like in the past?
- What did you like or dislike about learning science?
- How does science relate to your life?

What skills are needed for science?

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